

**Report of the
Working Integrated Process Team
On
Material Inspection and Receiving
Report (DD Form 250)**



April, 1999

Unclassified Distribution Unlimited

Office of the Deputy Secretary of Defense

TABLE OF CONTENTS

EXECUTIVE SUMMARY

I. INTRODUCTION

II. MEMBERSHIP

III. STRATEGY

IV. FACT FINDING

- A. GENERAL COUNSEL
- B. PURCHASE CARD
- C. DOD PAPERLESS CONTRACTING WIPT/WIDE AREA WORKFLOW
- D. PAPERLESS MIRR STUDY
- E. SPS UNIVERSAL INTERFACE
- F. NATIONAL DEFENSE INDUSTRIAL ASSOCIATION (NDIA)
- G. CONTRACT CLOSEOUT TEAM
- H. DEFENSE PROCUREMENT PAYMENT SYSTEM (DPPS)
- I. FUELS AUTOMATED SYSTEM (FAS)
- J. STANDARD PROCUREMENT SYSTEM (SPS)
- K. ELECTRONIC DATA INTERCHANGE (EDI)
- L. ELECTRONIC TRACKING AND ORDERING INVOICING SYSTEM (TOS)
- M. DEFENSE MEDICAL LOGISTICS STANDARD SUPPORT (DMLSS)
- N. JOINT TOTAL ASSET VISIBILITY (JTAV)
- O. CONTRACT RECONCILIATION REGISTRATION SYSTEM (CRRS)
- P. DCMC BELL CREDIT CARD PROGRAM TEST
- Q. EDI FAST PAYMENT

V. ANALYSIS

- A. CURRENT PROCESS
- B. PROPOSED ELECTRONIC MIRR PROCESS
- C. ANALYSIS OF THE GAPS

VI. RECOMMENDATIONS

- A. ELECTRONIC INVOICE
 - 1. Support efforts to expand the use of purchase cards.
 - 2. Use electronic single form to combine invoice and MIRR.

- B. ACCEPTANCE
 - 1. Electronic Acceptance/Rejection Validation
 - 2. ANSI ASC X12 Implementation Convention
- C. SHIPMENT IDENTIFICATION
- D. SHIPMENT STATUS
- E. IMPROVEMENT RECOMMENDATIONS FOR EXISTING ELECTRONIC SYSTEMS
- F. IMPROVEMENT RECOMMENDATIONS FOR EDI
- G. IMPROVEMENT RECOMMENDATIONS FOR WAWF
- H. IMPROVING STANFINS
- I. REVIEW OF FAR AND DFARS

VII. SUMMARY

VIII. GLOSSARY

APPENDICES

- A. Defense Reform Initiative Directive, "Paperless DD Form 250, Material Inspection and Receiving Report"
- B. DD Form 250 Users.
- C. ANSI X12-XXX chart.
- D. DFARS APPENDIX "F", Material Inspection and Receiving Report Revision.
- E. Action Plan.

FIGURES

Figure #1, Current MIRR Process

Figure #2, Proposed Electronic MIRR

EXECUTIVE SUMMARY

ES 1.0 THE MATERIAL INSPECTION AND RECEIVING REPORT (MIRR) WORKING INTEGRATED PROCESS TEAM (WIPT)

The Deputy Secretary of Defense established the MIRR WIPT on April 13, 1998, through Defense Reform Initiative Directive (DRID) #33, Paperless DD Form 250, Material Inspection and Receiving Report (Appendix A). WIPT members include representatives from the Army, Navy, Air Force, DoD Inspector General (DoD IG), Defense Contract Management Command (DCMC) and Defense Logistics Support Command (DLSC) of the Defense Logistics Agency (DLA), Defense Security Assistance Agency (DSAA) (Defense Security Cooperation Agency (DSCA) after 1 Oct 98), Defense Finance and Accounting Services (DFAS), and Defense Information Systems Agency (DISA). DRID #33 directed the WIPT to:

- Conduct a comprehensive review of the MIRR.
- Develop recommendations to streamline the MIRR process, making it simpler, easier, and faster.
- Transition the MIRR process to a paperless environment.

The team's recommendations to re-engineer and transition the DD Form 250 to a paperless environment embody five keys for success when looking for solutions to streamline this business process. First, this process can be scalable to the various applications; considering the size of DoD, our recommendations can be prototyped to production. The second key recommends interoperability with Allied, Joint and Coalition partners. The third key specifies our solutions will be protected and secure Defense-wide. The fourth key deals with cost effectiveness and the acquisition of Information Technology (IT) at reduced prices as competition is a major factor. The last key to success is that solutions be timely. DoD cannot wait years under old acquisition paradigms; IT has an eighteen-month turnover in today's environment.

ES 2.0 ROLE OF THE MIRR

The DD Form 250 (paper MIRR) is one of the most widely used DoD forms. It provides evidence of Government acceptance, receipt, inventory and status control. Contractors may use

the DD Form 250 as an invoice, packing list, and as shipment notice to aid the Government in its inventory control. As a result, we concluded that the DD Form 250 had four main functions: invoice, evidence of inspection and acceptance, shipment identification, and shipment status.

To pay a contractor for services and/or supplies rendered, the paying agent (i.e., DFAS) requires the following:

- A contract for supplies and/or services.
- Evidence of Government receipt and/or acceptance of the supplies and/or services (a key function of the DD Form 250).
- An invoice for the supplies and/or services from the contractor (sometimes a DD Form 250).

The paying agent/database validates the information provided in the invoice and DD Form 250 to the contract. Multiple re-keying of the same information may lead to high error rates. These errors delay validation and in turn delay contractor payment. The services paid contractors approximately \$14 Million interest penalties in FY 97, a portion of which is related to DD Form 250 processing.

ES 3.0 PROCESS IMPROVEMENTS

The team reviewed four systems, in several stages of development, which make the current MIRR process paperless:

- Defense Contract Management Command (DCMC) Electronic Data Interchange (EDI) DD Form 250.
- Paperless Contracting Working Integrated Process Team (PCWIPT) Wide Area Workflow (WAWF).
- Federal Systems Integration and Management Center (FEDSIM) Tracking and Ordering System (TOS).
- Defense Medical Logistics Standard Support (DMLSS).

None of the four systems currently satisfies requirements of all DoD users. The DCMC EDI DD 250 program updates MOCAS using the EDI American National Standards Institute (ANSI) ASC X12 3050 856 Ship Notice/Manifest Implementation Convention (IC). WAWF and TOS are in the process of developing this capability using the same IC. WAWF is in pilot testing and is expected to meet all DoD requirements

as future versions are fielded. DMLSS is a catalog procurement system and does not update databases.

ES 4.0 RECOMMENDATIONS

Earlier versions of the draft report received limited distribution. As a result of the comments received from OASD(A&T)DP, DoD GC, DFAS, and DoD IG, we removed from the report the recommendations: Payment on Receipt of Invoice, Payment upon Receipt/Acceptance, and Payment Without Invoice for recurring preset charges. These will be worked as a separate issue.

The team recommends using the proposed ANSI ASC X12 XXX transaction set to replace the existing 810 (Invoice), 856 (Ship Notice Manifest) and 864 (Text Message) transaction sets currently used by the previously mentioned systems. This will allow data, with necessary edits, to be shared through interfaces with performance and financial databases, including contractor systems. This will eliminate re-keying (which causes associated errors) and matching problems, and will facilitate a paperless environment. Additional recommendations are as follows:

- Support efforts to expand the use of purchase cards as recommended by the DoD reengineering team (see IV.2 and VI.A.1).
- Acceptance/Rejection will be input electronically using EDI, WAWF, or SPS, etc.
- Eliminate the use of DD Form 250 as a packing list.
- DCD include the capability to receive, process, and store electronic DD250 data.
- Use electronic means for notification of shipment.
- Improve EDI and WAWF databases.
- Improve the Standard Finance System (STANFINS), Redesign Subsystem (SRD-1), payment verification process by modifying the Electronic Funds Transfer (EFT) payment system to provide a separate payment for each invoice.
- Review FAR/DFARS to determine impact of electronic process/changes needed - Re-write Appendix F (Material Inspection and Receiving Report) of the DFARS to make electronic processing required.
- Require use of Public Key Infrastructure (PKI).

Where implementation of these recommendations may require FAR/DFARS changes, additional modifications will be coordinated through the Defense Acquisition Regulations (DAR) Council. Where implementation of recommendations may require statutory changes, draft legislation should be proposed through appropriate channels.

ES 5.0 RECOMMENDATIONS, INTERIM GUIDANCE FOR DEPARTMENT OF DEFENSE (DoD) PUBLIC KEY INFRASTRUCTURE (PKI), OASD POLICY LETTER DATED AUGUST 11, 1998.

The goal of this DoD-wide infrastructure is to provide general purpose PKI services (e.g., issue certificates supporting digital signature and encryption, provide directory services, enable the revocation of certificates, etc.) to a broad range of applications, at the levels of assurance consistent with operational mission imperatives.

DoD Information Assurance Director will staff three critical documents (DoD X.509 Certificate Policy, DoD Certification Practice Statement, and DoD Public Key Infrastructure (PKI) Roadmap). These documents will contribute to establishing the enterprise-wide end-state for the DoD PKI and provide guidance and approval for the use of DoD PKI medium assurance infrastructure.

The team recommends that all future paperless initiatives incorporate and comply with the DoD PKI medium assurance infrastructure.

I. INTRODUCTION:

The Deputy Secretary of Defense established the MIRR WIPT on April 13, 1998, through Defense Reform Initiative Directive (DRID) #33, Paperless DD Form 250, Material Inspection and Receiving Report (Appendix A). WIPT members include representatives from the Army, Navy, Air Force, DoD Inspector General (DoD IG), Defense Contract Management Command (DCMC) and Defense Logistics Support Command (DLSC) of the Defense Logistics Agency (DLA), Defense Security Assistance Agency (DSAA), Defense Finance and Accounting Services (DFAS), and Defense Information Systems Agency (DISA). DRID #33 directed the WIPT to:

- Conduct a comprehensive review of the MIRR.
- Develop recommendations to streamline the MIRR process, making it simpler, easier, and faster.
- Transition the MIRR process to a paperless environment.

II. MEMBERSHIP (19 members)

Army

Linda Butler, Carmen Jennings, Edward Hamlet

Navy

David Carter

Air Force

Sharon Washington

Defense Logistics Agency (DLA)

Chief Information Office (CI)
Frank Conneen

Defense Contract Management Command (DCMC)

Aristides Maldonado, Esy Dunn, William Murphy,
Barbara Griffin, Angela Brown, Bill Erdbrink, and
Jim Treadwell

Defense Logistics Support Command (DLSC)
Marvin Williams

Defense Security Assistance Agency (DSAA)
Sheila M. Taylor

Defense Finance and Accounting Service (DFAS)
Gary Aslett

Defense Information Systems Agency (DISA)
Bill Sirk, Roger Hund

Department of Defense Inspector General (DoD IG)
Clarence Knight

III. STRATEGY

The DD Form 250 was examined for its functionality. It was determined that it is used for four main purposes (or processes): invoice, evidence of inspection and acceptance, shipment identification, and shipment status. The DD Form 250 is also used as a packing list. Appendix B provides an analysis of the DD Form 250 users and use.

This document has great impact on the payment system. When required, payment to the contractor may not be authorized unless some key fields of the DD Form 250 are accurate and complete. Even if every data entry is correct, the system may be impeded by late receipt and/or processing of the document. As a result, the system becomes backlogged, contractors receive payments late, and the Government expends millions of dollars in interest payments. The DD Form 250 also requires multiple distribution, sometimes within the same agency. There is also duplication of effort and delays in matching at DFAS when the contractor submits both an invoice and DD Form 250 to DFAS for payment.

Thus the team identified the need to re-engineer the DD Form 250 to accommodate an electronic payment process that would be more efficient and less duplicative. The following plan of action was developed and executed.

A. Established working guidelines for the group and timetables for draft and final reports.

- B. Reviewed data elements in the Paperless Material Inspection and Receiving Report (1991).
- C. Determined which data elements on the DD Form 250 are required to make payment.
- D. Developed flowcharts of the current MIRR and the proposed processes.
- E. Finalized recommendations to be presented in the draft report and divided the WIPT into subgroups to address each recommendation in detail.
- F. Invited industry groups to participate in the WIPT effort and briefed them to obtain their reaction to the recommendations.
- G. Met with other DoD groups/teams to learn of other initiatives that could provide useful information.
- H. Provided weekly updates, briefings, and cross talks to all agencies represented and solicited feedback accordingly.
- I. Consolidated findings and recommendations into a draft report to be reviewed for legal compliance.
- J. Submitted final draft report.
- K. Submit final report.

Recommendations of this final report can only be implemented through changes to current Government and private sector business practices, and may require changes or refinements to the FAR/DFARS.

IV. FACT FINDING

In accordance with our mandate to re-engineer the current DD Form 250 process, we reviewed other DoD initiatives, and met with representatives of the private sector and Government. Other areas were explored that should prove beneficial to our recommendations for a new and improved process. The following groups briefed the team:

A. DLA General Counsel

DLA General Counsel discussed various legal issues with the team. Counsel indicated, although there are legal issues to be explored and addressed, there is no specific bar to the use of Electronic Commerce in contracting.

B. Purchase Card

Currently the Government purchase card is being used to purchase supplies and services that do not exceed \$2,500. The Government is looking to increase the limitation to \$100,000 in order to reduce DFAS commercial invoice workload. The Government Purchase Card payment process is an exception to the established Government payment procedure. This system uses a Pay and Confirm process that allows immediate payment (often next day) by the bank after purchase without benefit of acceptance or delivery. Reconciliation occurs when the credit card approving official matches the credit card statement to the individual cardholders' logs. However, the DoD Purchase Card Program Management Office briefed that as of January 1999, small business concerns will most likely prevent an increase in this threshold. Complete information on the purchase card program can be found at their web site: <http://purchasecard.sarda.army.mil>.

C. Wide Area Workflow (WAWF)

DoD Paperless Contracting Working Integrated Process Team (PCWIPT) Wide Area Workflow, provided briefings and demonstrations to the group. The goal of paperless contracting is to eliminate all internally required paper transactions from the contracting process. The PCWIPT charter is to provide a plan for paperless contracting, i.e., electronic contracting from initiation throughout contract closeout.

Wide Area Workflow systems components are:

1. Electronic Document Management/Electronic Document Workflow (EDM/EDW) - provides paperless workflow and distribution capability for contract administration. It is now a pilot program.
2. Electronic Data Access (EDA) - share common contracting documents using commercial internet and World Wide Web (WWW) technology. It allows joint on-

line access to common contracting documents (contracts, modifications, Government Bill of Lading (GBL), Material Acceptance Accounts Payable Report (MAAPR), and vouchers) eliminating the need for paper.

3. Electronic Data Interchange (EDI) - continues to support electronic invoicing for payment compatible with 810/invoice, 856 MIRR/ship notice, and 864 Text Message transaction sets.

D. Paperless Material Inspection Receiving Report Study (1991)

Logistics Management Institute (LMI), producer of the 1991 "Paperless Material Inspection and Receiving Report," discussed the report and encouraged this team to utilize new technologies and processes as a means to accomplish our recommendations specifically through the use of SPS and Shared Data Warehouse (SDW).

E. Standard Procurement System (SPS) Universal Interface

The Navy Electronic Acquisition Project Office (EA 21) briefed the status of Navy SPS Universal Interface to legacy systems on both the front and back end of the DoD end-to-end contracting process. The Navy plans to develop electronic interfaces to allow legacy systems to communicate with SPS.

F. National Defense Industrial Association (NDIA)

National Defense Industrial Association met with the team to discuss the proposed recommendations and the impact on industry. It was determined that contractors will have the capability to electronically generate an ANSI ASC X12 810 invoice in the future.

G. Contract Closeout Team

The Contract Closeout DoD WIPT provided a progress report and outlined the content of their draft report. The Closeout Team recognizes that the submission of final vouchers by contractors is a major bottleneck in the contract closeout process. A key remedy in this area is to ensure that Contracting Officers understand their authority to make unilateral decisions regarding contract closeout without receipt of final vouchers.

This may be accomplished through a new FAR clause or by clarifying the existing FAR and DFARS to take this kind of action. Payment withholds or incorporation of specific schedules for fixed fees may encourage the submission of final vouchers.

H. Defense Procurement Payment System (DPPS)

The DPPS program representative briefed DFAS current "paperless initiatives" and noted that the current paper process has too many data entry points leading to keying errors. There is duplication of effort as well as unmatched disbursements. DPPS will be used to calculate vendor payments, grants, and other agreement entitlements. It will use data generated from sources such as procurement systems, EDI transactions, Electronic Document Management, and source data entry.

I. Fuels Automated Systems (FAS)

DFAS Columbus provided "to be" and "as is" briefing on their Fuels Commodities Financial & Accounting Systems. The "to be" system is scheduled to replace the Defense Fuels Automated Management System (DFAMS) as well as other DLA contract, logistic, and budget functions. FAS is utilizing an Oracle Commercial Off the Shelf COTS database application. This program is undergoing extensive modifications to meet all of the DLA and DFAS requirements.

J. Standard Procurement System (SPS)

The DLA SPS Program Office identified SPS as being more than a contract administration tool. It will replace eight DoD legacy systems including the contract administration function in MOCAS. Version 4 is currently being used by the Navy and was tested by DCMC Phoenix for DCMC requirement definition inclusion in version 5.

K. Electronic Data Interchange (EDI)

The DCMC EC/EDI Office demonstrated its EDI DD250 Process. This program uses EDI ANSI ASC X12 transaction sets as its basis. The contractor and DCMC process is totally electronic from inception to closeout, including generation of data populating MOCAS. This was a multi-

agency/contractor programming effort consisting of DCMC, DFAS, DLA System Design Center (DSDC), Fleet Material Support Office (FMSO), and Logistics Management Institute (LMI).

L. Electronic Tracking and Ordering Invoicing System(TOS)

Federal Systems Integration and Management Center (FEDSIM), briefed a technology initiative to automate the FEDSIM federal procurement process. The majority of their contracts are fixed price ID/IQ or Basic Ordering Agreement type contracts for information systems hardware, software and services. The goals were to achieve a business process improvement by reducing or eliminating paper and implementing digital exchange of contract data. The resultant Tracking and Ordering System (TOS) provides a complete electronic commerce solution including order initiation, contract/delivery order award and vendor invoicing. TOS links Government and industry within a single workflow that allows all transactions to be completed electronically. The process includes multiple federal agencies: GSA FEDSIM, Fort Huachuca Directorate of Contracting, Fort Huachuca Directorate of Resource Management, DFAS, General Services Administration (GSA) Finance, Fort Worth.

The TOS invoicing design philosophy allows vendors to use familiar commercial technologies, leverages federal EDI initiatives, and eliminates dependencies on costly VANs. Vendors submit electronic invoices via the web "inbox." FEDSIM program managers approve/reject and forward electronically to the Paying Office who has no further responsibility to match invoice to receiving report because it is an all-in-one electronic document. TOS interfaces with Army SAACONS procurement system transferring award data to Army system of record, replacing DD Form 1155 and/or SF Form 30. Notification of award is via web. DD Form 250, MIRR, is replaced by electronic invoice. Work is ongoing for a module that will connect TOS to SPS. FEDSIM received a Government Technology Leadership Award in 1997 for this initiative. TOS has been fully operational for approximately 2 years and the average number of days for payment of an invoice has dropped from 45 to 14.

M. Defense Medical Logistics Standard Support (DMLSS)

Defense Medical Logistics Standard Support Program Office briefed the DoD medical communities' electronic commerce initiatives. DMLSS has implemented a "Prime Vendor" contracting approach, which includes electronic solicitation, proposal, award, tracking, and payment processes. The DD Form 250 "Material Inspection and Receiving Report" and DD Form 1155 "Order for Supplies and Services" have been eliminated altogether.

In transitioning to a "Paperless Contracting" system, DMLSS also eliminated "Line Item Accountability" and instituted "Monthly Transaction and Payment Verification" requirements, making verification similar to reviewing your monthly credit card invoice.

The DMLSS utilizes current WEB technology browsers, EDI 850 and ANSI ASC X12 format for all electronic transactions. Any vendor with a computer and access to the World Wide Web can participate. All database information resides on the Government servers who restrict access to authorized users by use of passwords and authorization levels.

The DMLSS widened its scope of streamlining the acquisition process by eliminating the bottlenecks in the military supply system and adopting "Best Practices" of commercial medical re-supply. In doing this, the burden of long-term storage was transferred from the military depots to the vendor, thus reducing depot medical inventories by 85%.

The DMLSS "Prime Vendor" program maximizes acquisition costs by providing for specific discounts on products; bulk purchasing; and a Web Site Electronic Catalog listing vendor products and pricing from which the end user chooses supplies.

For an investment of \$138 million, DMLSS has returned a savings of \$785 million. DMLSS received the 1997 Government Technology Leadership Award for Innovative Electronic Commerce Initiatives.

N. Joint Total Asset Visibility (JTAV)

JTAV Program Office provided an informational brief of JTAV's current operational process and the planned system architectures. The JTAV Program mission is to

develop a capability which provides Commanders in Chief (CINCs), the military services, and other DoD corporate users timely and accurate data on the location, movement, status and identity of units, personnel, equipment and supplies once those items have been accepted in Government inventory. Currently the JTAV system does not use an ANSI ASC X12 transaction. JTAV was initially fielded using a client server architecture. Currently the JTAV office is testing the planned architecture to support direct access to data sources (through Web-based connectivity NIPRNET/SIPRNET/LAN).

O. Contract Reconciliation Registration System (CRRS)

The CRRS team briefed the proposed new DoD-wide CRRS process. This new process eliminates duplicate reconciliation of the same contracts at various functional locations, and provides for a more efficient process than currently exists. Their objective is to resolve existing balances of Unmatched Disbursements (UMDs) and Negative Unliquidated Obligations (NULOs) (overpayments to contractors) by performing corporate-wide reconciliation of contracting, entitlement, and accounting records and processing corrective adjusting transactions. The CRRS process would reconcile contract, entitlement, and accounting records electronically via the Internet and focus through a designated Responsible Contract Reconciliation Agent (RCRA). This person could be an accounting, entitlements, or contracting individual (in most cases contracting), and will be the accountable officer who certifies that all adjustments are correct.

P. DCMC Bell Credit Card Test Program

Discussions were held with DCMC Bell Helicopter in Ft. Worth, Texas. Bell Helicopter is one of three sites participating in the testing phase of an expanded credit card program. Although the program is in the test phase, preliminary results appear favorable. The contractor gets paid within two days, no duplication of payments, minimizes errors and contract closeout is more timely.

Q. EDI FAST PAYMENT

The DFAS EDI office has developed an EDI Fast Payment process. Functional testing has been successfully completed. The application and environmental testing will be conducted in the near future. The ANSI ASC X12 810 transaction was modified to accommodate required additional shipment data. The transaction, initiated by the contractor, is divided by the application into two sets of data (Invoice and Shipment). Invoice data populates MOCAS and the shipment data is provided to the voucher examiner on a research screen for manual input into MOCAS.

V. ANALYSIS

In order to re-engineer the process, we began by examining the current methods and discussing ways to improve them. We identified ways to simplify and eliminate steps.

Earlier versions of the draft report received limited distribution. As a result of the comments received from OASD(A&T)DP, DoD GC, DFAS, and DoD IG, we removed from the report the recommendations: Payment on Receipt of Invoice, Payment upon Receipt/Acceptance, and Payment Without Invoice for recurring preset charges. These will be worked as a separate issue.

In our examination process we identified methods to incorporate other initiatives discovered during the fact-finding process. We divided these into three parts:

- A. Reviewed the current paper MIRR (DD Form 250) process.
- B. Developed the ideal proposed electronic MIRR process.
- C. Analyzed the gaps between the two processes.

A. Current MIRR Process:

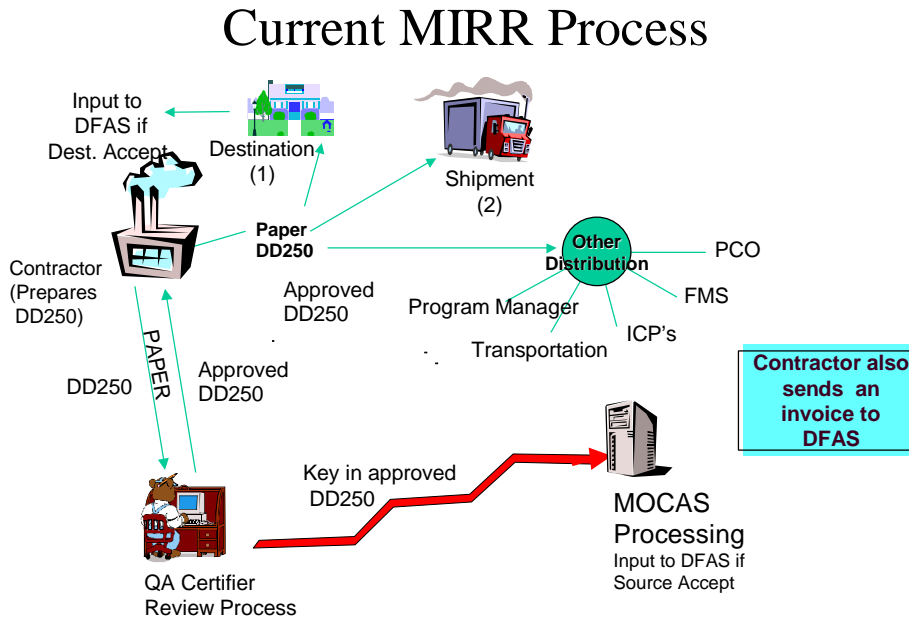


Figure 1 This depicts current DD Form 250 (paper MIRR) process.

We examined the current process and found:

1. Even where the process had been partially automated, there were still numerous paper copies being printed and distributed.
2. Multiple exchange of paper between the Government and the contractor.
3. Redundant input of same data elements can result in data errors (paper and systems).
4. The same documents being retained in storage at multiple locations.
5. Interest and unliquidated obligations due to matching problems at DFAS.
6. Duplicate audit functions performed at various agencies.
7. Invoice required in addition to DD Form 250.

The reconciliation process of matching the invoice and receiving documentation can result in document rejection, which delay payment and requires rework.

B. Proposed Electronic MIRR Process:

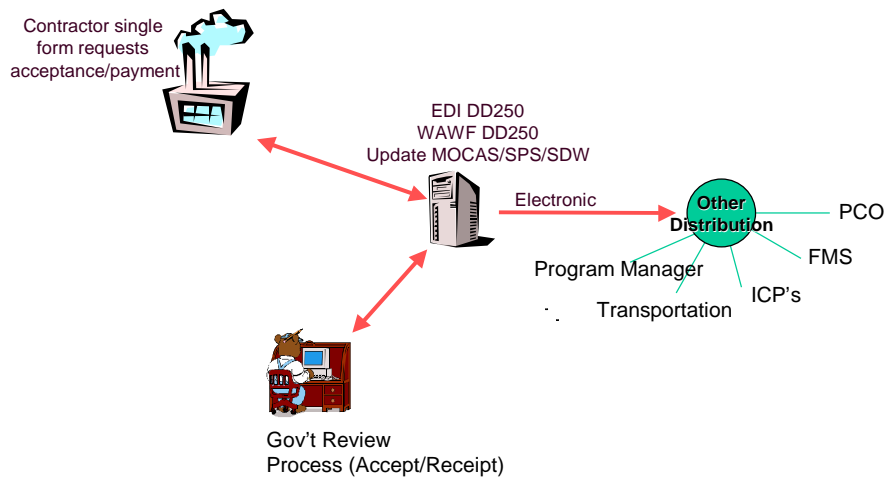


Figure 2 The proposed MIRR process includes the use of EDI ANSI ASC X12 Implementation Conventions (810, 856, 864, and 997) which are available now. For the long-term the process would combine the 810 and 856 into a single EDI ANSI ASC X12 transaction set.

Short Term:

It was determined we can use the current EDI DD Form 250 process, with the recommendation to expand its capabilities to include the reporting status for all phases of the procurement process to all activities requiring the information.

The WAWF process can also be utilized if the current process is expanded to address requirements for upfront, initial data acceptance (to include EDI) and backend data generation to payment systems. Inclusion of additional data elements also needs to be addressed.

Long Term:

The long term solution is to create a totally electronic payment method that will update numerous performance and financial databases, and will initiate/simplify the contract closeout process. This will be accomplished by developing EDI Implementation Convention(s) that will accommodate the acceptance/receiving and invoicing requirements, and will also process and generate payment. During the process cycle, notification of status will be provided to appropriate personnel.

C. Analysis of the Gaps Between the Current and Proposed MIRR Processes

Examined two alternatives to make the process paperless: dictating a standard DoD Wide MIRR system or generating standard data conventions to be used by multiple MIRR systems to populate SPS and the Shared Data Warehouse.

1. In fact finding we learned that:

a. EDI ANSI ASC X12 has transaction sets for invoice and acceptance data, which can be used to populate MOCAS and its replacement systems.

b. At least three automated MIRR initiatives have had some success at making the process paperless. These are DCMC EDI DD 250, PCWIPT WAWF and GSA's FEDSIM TOS. The EDI DD 250 program already generates ANSI ASC X12 transactions to update MOCAS while the WAWF is testing the EDI generation segment of their application to ensure its capability to update MOCAS as part of the pilot test. TOS is a self-contained system used by GSA and interfaces with the Army's Standard Army Automated Contracting System (SAACONS) procurement system, and DFAS vendor pay.

2. Since the existing systems were already working towards generating ANSI ASC X12 to update other existing databases, we concluded that:

a. DoD systems should exchange information using EDI to automatically update systems.

b. Recommendations are needed to improve SPS, EDI DD Form 250 and the WAWF DD Form 250 projects. (see Improvement Recommendations for Existing Electronic Systems).

3. We learned that there were data entry errors caused by having to re-input the same information due to initial input errors. The error rate can be reduced if the Government uses EDI.

4. Additional benefits can be gained by identifying a minimum set of data fields to be provided by contractors, eliminating the need for the contractor to transmit redundant data that the Government already possesses.

These were the types of scenarios the WIPT considered which in turn led to the recommendations that follow.

VI. RECOMMENDATIONS

A. Electronic Invoice

1. Support the efforts of the DoD Purchase Card Reengineering Team to expand the use of the purchase card.

a. Present: (FAR 13.301) The Government-wide commercial purchase card is limited to fixed-priced micro-purchases (\$2,500), placing task/delivery orders under a basic contract or ordering agreement or blanket purchase agreement, and making payments when the contractor agrees to accept payment by the card.

b. Proposed Changes: Expand the use of the purchase card as determined by the DoD Reengineering Team.

c. Justification: The Department of Defense is reengineering the policies and procedures governing purchase card usage.

The Department of Agriculture Business Process Reengineering study determined that paper procurement transactions cost the Government about \$77 million for administrative processing; magnetic strip transactions cost about \$17 million (Source: *Electronic Government*, March/April 98).

DFAS currently processes about 9.9 million commercial invoices per year. Although an estimated 7.7 million meet the micro-purchase threshold, only about 1.2 million of the invoices result from the purchase card (Source: DoD Purchase Card Reengineering Team Fact Sheet).

The Purchase Card Program of today will produce faster and simpler procurements, less processing of financial and procurement documentation, and foster processing and payment of commercial invoices. It is anticipated that if these policies and procedures are implemented, the Government will procure its needs quicker and easier, commercial vendors will be reimbursed faster, and interest payments under the Prompt Payment Act of 1982 should be reduced. Changes will result in an overall reduction in costs to the Government - both in dollars and manpower.

d. Summary: Support for the expanded use of the purchase card reengineering initiative is consistent with the goals and objectives of the paperless contracting initiatives. The DD Form 250 WIPT recommends expanded use of the purchase card to all commercial acquisitions and payments.

3. Combine invoice and MIRR into a single electronic process - Require contractors to provide an EDI ANSI ASC X12 transaction, or use the WAWF application to enter the information manually.

a. Present: Contractors submit a paper DD Form 250 when delivering goods or services that require inspection and acceptance by an authorized Government representative. Upon acceptance, the contractor then uses this same document as a packing list, and in some cases also submits it as an invoice for payment. When it is not used as an invoice, the contractor issues a separate invoice. In most cases, these documents are manually generated, processed and input into appropriate, pertinent databases. This process affords numerous opportunities for error generation and resulting rework.

b. Proposed Changes: Require contractors transition to an EDI process using an ANSI ASC X12 transaction set to generate one document that will satisfy inspection and acceptance and payment requirements. Using EDI, contractors will provide the Government applicable contractual information, per the list developed by this group in Appendix "D". Contractors generating an EDI transaction will be required to map the data, as prescribed in the transaction set, and compliance test transactions with the appropriate office/center to assure the data is being transmitted and received properly. When contractors have successfully transmitted three consecutive files with no errors or problems, they will be considered EDI compatible, and ready to submit EDI transactions in a production mode. If contractors do not wish to use EDI they may use the WAWF application to enter the information by typing it in manually.

c. Justification: This replaces the current manual mode with an automated electronic one that will automatically update appropriate performance and financial databases. Examples of anticipated benefits are as follows:

- 1) Streamlines the process by eliminating the time delay associated with the current, manual paper one.
- 2) Reduces error rate.
- 3) Improves data accuracy.
- 4) Eliminates duplication.
- 5) Reduces research and analysis time associated with rejections.
- 6) Reduces costs associated with preparation and distribution.
- 7) Allows timely payments.
- 8) Eliminates storage requirements to include time and space.

d. Summary: Requiring contractors to be ANSI ASC X12 compatible will ensure data and process standardization. It will also provide one of the necessary, major tools that will guarantee success. This requirement will greatly enhance implementation of the paperless initiative, and assist DoD in attaining a major goal in the paperless process.

B. Acceptance

1. Electronic Acceptance/Rejection Validation will be accomplished for SPS, WAWF, and EDI DD Form 250.

a. Present: Acceptance is by DD Form 250 or voucher signature of a paper invoice. Acceptance is either at source or destination.

b. Proposed Changes:

- 1) Contractor prepares an electronic invoice for payment. This will reduce data errors during entry, and track with contract schedule.
- 2) Contractor electronically notifies Government POC identified in the contract that shipment or completion of services has occurred.
- 3) Contractor submits electronic invoice to approving Government official.

- 4) Approving official authorizes acceptance/rejection by electronic signature/password. Provisions for partial acceptance and corrections will be required.
- 5) Approving official forwards electronic invoice to payment office.
- 6) Electronic invoice updates automated procurement system (financial/performance database).

c. Justification

- 1) Eliminates paper-invoicing process, thereby making more prompt payments.
- 2) Reduces costs associated with preparation and distribution of invoices.
- 3) Reduces manpower due to elimination of duplicative data entry requirements for both Government and contractor.

d. Summary: The recommendation is to delete the requirement for the contractor to provide a paper copy of the MIRR, and instead, to electronically transmit the identified information (Appendix D) for acceptance/rejection and payment.

2. EDI ANSI ASC X12 Implementation Convention (See A.3) - Combine invoice and receiving data into one electronic MIRR, thereby eliminating contractor requirement to submit a separate invoice and DD Form 250 (Appendix "D").

a. Present: Contractors may submit their own commercial invoices and/or DD Form 250's as proof of delivery, receipt or acceptance.

b. Proposed Changes: Contractors shall be able to combine invoice and receiving data into one electronic MIRR (See Appendix D). The use of Public Key Infrastructure (PKI), which will provide secure identification of receiving and invoicing transmissions, will be required.

c. Justification: The proposed recommendation shall allow contractors to eliminate duplicate data entries thus creating a more efficient invoicing process. Also, less data transmission should result in reduced data corruption.

d. Summary: Delivery, receipt and acceptance data is received from a variety of sources in multiple forms and formats. This information is used by the payment office to perform entitlement, by contract administration to monitor contractor performance and compliance with contract terms and conditions, and by some logistics systems, to track the fulfillment and generation of new requirements.

C. Shipment Identification

Eliminate the use of DD Form 250 as a packing list (Reference Appendix "F" Part 3 (F-307), Packing List Instructions Provided in Appendix E of this report). Use MIL-STD-129, ASTM 3591, or other contract requirements to specify the use of bar-code, commercial packing list, etc.

1. Present: Contractors are required to provide the receiving activity with a DD Form 250, which serves as the packing list.
2. Proposed Changes: Eliminate the DD Form 250 as a packing list and replace with the following:

Exterior containers and packages shall be labeled, lithographed, printed, or bar coded in accordance with MIL-STD-129, ASTM 3591 or by other contractually specified requirements. Commercial shipping documents/packing lists are authorized in lieu of, or in addition to, the above requirements. For FMS shipments, commercial shipping documents/packing lists are required when requested by the customer country.

3. Justification: Many contracts stipulate the use of MIL-STD-129 or ASTM 3951 documents instead of a DD Form 250 packing list. These recommendations will allow further implementation of current practices and eliminate the DD Form 250 packing list and its use in depot receipt processing which is duplication of effort.
4. Summary: The recommendation is to eliminate the requirement for the DD Form 250 to accompany shipments and to replace it with commercial documentation and other container marking. Receipt/Acceptance shall be by electronic signature.

D. Shipment Status

1. Require electronic mail addresses be included in the contract when shipment notification is necessary. When required, contractor should use electronic mail to notify recipients of shipments. WAWF will electronically notify those addresses listed in the contract that acceptance is complete and send the acceptance to DCD via EDI.

a. Present: Contractors must prepare paper MIRR DD Form 250 and mail to PCO, ACO, and consignee.

b. Proposed Changes: Replace paper distribution process with electronic notification. The contractor shall provide the following information in an electronic format to the required recipients whose e-mail addresses will have been identified in the contract. As a minimum, the following information is required:

Transaction Date, Contract Number, Buying Activity DODAAC, Order Number, Line Item Number, Shipment Number, Date Shipped, Mode of Shipment, Shipment Advice, Shipped To Address or Code, Marked For Address or Code, Stock/Part Number or MILSTRIP Number, Quantity Shipped, Transaction Status, Service Description, Performed At

Address or Code, Date Completed, and Document Identifier Code.

c. Justification:

- 1) Eliminate paper.
- 2) Replace current paper distribution process with electronic transmission, thereby ensuring receipt.
- 3) Replace paper files with electronic archiving.

d. Summary: The recommendation is to delete the requirement for the contractor to provide a paper copy of the MIRR, and instead, to electronically transmit this information to the required recipients.

2. Require that all Government organizations listed in DFARS Appendix "F" provide electronic mail addresses. All issued contracts will contain e-mail addresses for individuals requiring distribution and/or any other type of notification pertinent to subject contract.

a. Present: Contracts include physical addresses for Government agencies but no electronic mail addresses.

b. Proposed Changes: Contract shall include current contractor (where applicable) and Government electronic mail addresses which in-turn will update associated databases.

c. Justification: This change shall facilitate the electronic interchange of information between the Government and contractors.

d. Summary: To become paperless, the above change shall be implemented in conjunction with organizational databases.

E. Improvement Recommendations For Existing Electronic Systems

The DCMC EDI ANSI ASC X12 856 and pilot WAWF DD Form 250 programs offer a partial electronic solution. The current process requires the contractor to fill out an invoice and/or a DD Form 250, which essentially contain the same information. The EDI X12 process is useful for contractors who have a high volume of contractual transactions that require source acceptance; whereas, WAWF is especially useful for contractors who have a low volume of contractual transactions which require destination acceptance. Utilizing both programs together should provide a solution until one or the other can accommodate all processes or the single ANSI ASC X12 transaction can be incorporated.

F. Improvement recommendations for EDI

Expand the existing EDI DD Form 250 project to include any contractor who wishes to participate. Enhance the electronic notification requirements to mirror the proposed process.

1. Present: Only contractors who were initially involved in the project are being allowed to participate. This process accepts contractor, generated EDI ANSI ASC X12 856's, and provides DCMC Quality Assurance Specialists (QAS's) the capability of electronically processing them, when they are approved, to MOCAS. The contractor then prepares an invoice (EDI or manual, depending upon the process in place) and submits it to DFAS. Both processes are required to effect payment.

2. Proposed Changes: Provide the EDI capability to contractors desiring to participate, if they can furnish the data in the prescribed EDI ANSI ASC X12 format. Update the program to electronically generate notification of approval to appropriate destination and Buying Activities.

3. Justification: Replaces current manual process with an electronic one that will automatically update appropriate financial databases, and which will also include delivery status and inventory control. This addresses MRM #2, "Paperless Contracting." As enhancements are made to the program, performance databases will be included in

the updating process. Examples of anticipated benefits are as follows:

- a. Streamlining the Inspection and Acceptance process by eliminating the time delay associated with the manual, paper process.
- b. Reducing the number of errors associated with manual generation and input.
- c. Improving data accuracy.
- d. Eliminating duplication.
- e. Reducing research and analysis time for rejections.
- f. Reducing costs associated with preparation and distribution.
- g. Allowing timely payments.

4. Summary: Expanding this process to all eligible contractors reflects DoD's commitment to implement paperless initiatives, improves its business practices, and directly addresses MRM #2.

G. Improvement recommendations for Web-based Material Inspection and Receiving Report

Expand the Web-based application to accommodate the needs of all contractors to process high and low volume data transactions. Part of this expansion will address the automatic updating of financial and performance databases and generate payment.

1. Present: The plans are for a web-based system to support contractors with low volume, single CLIN contractual transactions by providing them the capability of filling out either a DD Form 250, Commercial Invoice or a combination of both on the Web. Both documents are required to affect payment and update performance databases.

2. Proposed Changes: Upgrade the existing "Proof of Concept" to address the additional requirements that would apply to the following:

- a. Address Mode of Shipment requirement.
- b. Address Free on Board (FOB) requirement.
- c. Provide capability of including multiple line item requirements and associated information as required (Description, Quantity Shipped/Received, Unit, Unit Price, etc.).
- d. Accommodate contractors who generate automated, high volume EDI ANSI ASC X12 856's.
- e. Automatically update financial and performance databases (MOCAS, SPS, DPPS, SDW, etc.).
- f. Automatically generate payment upon financial database update (eliminate the need for two supporting documents). For documents with final shipment indicator ("Z") do not allow payment - require system to flag the transaction to validate necessary closeout procedures before payment is accomplished.
- g. Include identified enhancements in, "Proof of Concept Testing."
- h. Provide multiple/batching electronic acceptance capability.
- i. Incorporate digital signature technology.
- j. Incorporate bulk fuels into the application (thus eliminating the DD Form 250-1, "Tanker/Barge Material Inspection Receiving Report").
- k. Include electronic notification for the following:
 - 1) Pending MIRR transactions (DCMC).

- 2) Processed MIRR transactions (contractor).
- 3) Shipment status (receiving destination).

3. Justification: Replaces current manual, paper dual invoicing process with an automated electronic system that will automatically update appropriate databases. This will also include delivery status and inventory control, and addresses MRM #2.

- a. Streamlines the process by allowing contractors to generate one electronic document that satisfies all the current requirements, and expedites the payment process to eliminate unnecessary delays. This will help eliminate interest payments in accordance with the Prompt Payment Act (DoD Financial Management Regulation Volume 10, Chapter 7, Section 070205).
- b. Replaces a manual system with an electronic one, reduces data error, and improves data validity.
- c. Electronic notification of appropriate parties will satisfy MIRR distribution requirements.

4. Summary: Employing the proposed electronic commerce processes reflects DoD's commitment to implement paperless initiatives, improves its business practices, and directly addresses MRM #2.

H. Improve the Standard Finance System (STANFINS)

Redesign Subsystem (SRD-1), payment verification process by modifying the Electronic Funds Transfer (EFT) payment system to provide a separate payment for each invoice.

1. Present: The SRD-1 payment system under EFT has no provisions for identifying vendor invoice numbers. Therefore, an aggregated payment to the vendor could be payment for one or for many invoices. In addition, the voucher to the Government customer aggregates the payment data.

This process hampers close out procedures for contracts/delivery orders. Identification is further complicated by discounts, short pays, interest payments, or other modifications to invoiced amounts.

2. Proposed Changes: DFAS should evaluate and reengineer the SRD-1 system of aggregated payments to vendors. Sending individual EFTs for each invoice and associating invoice numbers with invoiced totals will resolve the problem.

3. Justification/Summary: Reduce the intensive administrative burden of identifying individual invoices that are included in each payment. This burden occurs at three different locations: 1) vendor, 2) DFAS Vendor Pay Section, and 3) appropriate Contract Administration Office.

J. Review of FAR and DFARS

Review FAR and DFARS regulations to determine any impact from the proposed electronic MIRR and update as required.

1. Present: The current process allows the use of DD Form 250 for multiple purposes such as invoicing, inspection, and/or acceptance, packing list, and shipment status.

2. Proposed Changes: See appendix D. Below are the FAR and DFARS reviewed:

a. FAR:

- 13.3, Simplified Acquisition Methods
 - ⇒ 13.301(c), Government-wide Commercial Purchase Card
 - ⇒ 13.401, General
 - ⇒ 13.402, Fast Payment Procedure, Conditions for Use
 - ⇒ 13.403, Preparation and execution of orders
 - ⇒ 13.404, Contract clause
- 32.905, Invoice Payments
- 52.213-1, Fast Payment Procedure

b. DFARS:

- 213.302, Fast Payment Procedure, Conditions for Use
- 246.370, Material Inspection and Receiving Report
- 246.471, Authorizing Shipment of Supplies
- 246.671, Procedures
- 246.701, Definitions
- 252.246-7000, Material Inspection and Receiving Report

3. Justification/Summary:

Updating the regulations will provide the authority to incorporate the proposed changes.

VII. SUMMARY

A. Purpose:

DRID #33-Review DD Form 250 process, recommend solutions to streamline, simplify, and to make the payment process more efficient and paperless.

B. Problems with use of paper DD250 and paper invoices:

Multiple distribution, re-entry of data, too many files, slow processing resulting in interest payments and unliquidated obligations, and audit functions duplicated at DFAS and contracting offices.

C. Recommendations:

- Support efforts to expand the use of purchase cards.
- Use electronic single form to combine invoice and MIRR.
- Acceptance/Rejection will be input electronically using EDI, WAWF, or SPS, etc.
- Eliminate the use of DD Form 250 as a packing list.
- SDW and DPPS include all data required for EDI.
- Use electronic means for notification of shipment.
- Improve EDI, WAWF, and SPS databases.
- Improve the Standard Finance System (STANFINS), Redesign Subsystem (SRD-1), payment verification

process by modifying the Electronic Funds Transfer (EFT) payment system to provide a separate payment for each invoice.

- Review FAR/DFARS to determine impact of electronic process/changes needed - Re-write Appendix F to make electronic processing required.
- Require use of Public Key Infrastructure.

D. Discussion:

The four concepts discussed in the report address the scalability, interoperability, cost effectiveness, timeliness and security of the proposed MIRR process changes. It is scalable in that it can be tailored to meet different business and Government entities both small and large. It is interoperable in that it will utilize standard business practices and technical standards. It is cost effective in that paperless systems reduce transaction costs. In terms of timeliness, DD Form 250's will be transmitted instantly, thus reducing the government's cycle time. We will use Public Key Infrastructure (PKI) systems to ensure security.

E. Action Plan:

Action plan is provided in Appendix E of this report.

VIII GLOSSARY

ACO----- Administrative Contracting Officer

AMC ----- Army Materiel Command

ANSI ----- American National Standards Institute

ASA(RDA)----- Assistant Secretary of the Army, Research,
Development and Acquisition)

ASC X12 ----- Accredited Standards Committee (X12)

AUTODIN ----- Automatic Digital Network

CAL ----- Contractor Alert List

CAO ----- Contract Administration Office

CCSS ----- Commodity Command Standard System

CI ----- Chief Information Office

CINC----- Commander-In-Charge

CMD ----- Contract Management Division

CRRS----- Contract Reconciliation Registration System

DB----- Database

DCMC ----- Defense Contract Management Command

DFARS ----- Defense Federal Acquisition Regulation
Supplement

DFAS ----- Defense Finance and Accounting Services

DFSC ----- Defense Fuels Supply Center

DISA ----- Defense Information System Agency

DISMS ----- Defense Integrated Subsistence Management
System

DLA ----- Defense Logistics Agency

DLSC ----- Defense Logistics Support Command
DMLSS----- Defense Medical Logistics Standard Support
DoD ----- Department of Defense
DODAAC----- Department of Defense Automated Address Code
DPSC ----- Defense Personnel Support Center
DPPS ----- Defense Procurement Payment System
DRID----- Defense Reinvention Directive
DSAA ----- Defense Security Assistance Agency
DSC ----- Defense Supply Center
DSCA----- Defense Security Cooperation Agency
 (formerly DSAA)
DSDC----- DLA Systems Design Center
EA----- Electronic Acquisition
EC/EDI ----- Electronic Commerce/Electronic Data
 Interchange
EDA----- Electronic Data Access
EDM----- Electronic Document Management
EDW----- Electronic Document Workflow
ERS ----- Evaluated Receipt Settlement
FAR ----- Federal Acquisition Regulation
FAS ----- Fuels Automated System
FEDSIM ----- Federal Systems Integration and Management
 System
FMR----- Financial Management Regulation
FMS ----- Foreign Military Sales

| | |
|-----------------------|---|
| FMSO ----- | Fleet Material Support Office |
| FOB ----- | Free On Board |
| GSA ----- | General Services Administration |
| GBL ----- | Government Bill of Lading |
| ICP ----- | Inventory Control Point |
| ITI ----- | Information Technology Integration |
| JTAV ----- | Joint Total Asset Visibility |
| KTR ----- | Contractor |
| LAN ----- | Local Area Network |
| LMI ----- | Logistics Management Institute |
| MAAPR ----- | Material Acceptance Accounts Payable Report |
| MACOM ----- | Major Command |
| MILSCAP ----- | Military Standard Contract Administration Procedures |
| MIL-STD ----- | Military Standard |
| MILSTRIP ----- | Military Standard Requisitioning and Issue Procedures |
| MIRR ----- | Materiel Inspection and Receiving Report (DD Form 250) |
| MOCAS ----- | Mechanization of Contract Administration Services |
| MRM ----- | Management Reform Memorandum |
| NIPRNET ----- | Unclassified (but Sensitive) Internet Protocol Routing Network |
| NDIA ----- | National Defense Industrial Association |
| NULO ----- | Negative Unliquidated Obligation |

OSD ----- Office of The Secretary Of Defense
PCO ----- Procurement Contracting Officer
PCWIPT----- Paperless Contracting Working Integrated
 Process Team
PKI----- Public Key Infrastructure
PQA ----- Procurement Quality Assurance
PQDR ----- Product Quality Deficiency Report (SF 368)
QAR ----- Quality Assurance Representative
QAS----- Quality Assurance Specialist
RCRA----- Responsible Contract Reconciliation Agent
ROD ----- Report Of Discrepancy (SF 364)
 (Replaced by SDR)
SAACONS----- Standard Army Automated Contracting System
SAMMS ----- Standard Automated Materiel Management
 System

SDR----- Supply Discrepancy Report (SF 364)
SDW ----- Shared Data Warehouse
SIPRNET----- Secret Internet Protocol Routing Network
SPEDE ----- SAMMS Procurement by Electronic Data
 Exchange
SPN ----- Shipment Performance Notice
SPS ----- Standard Procurement System
SRD-1 ----- STANFINS Redesign Subsystems
STANFINS----- Standard Financial System
TOS----- (GSA/FEDSIM) Tracking and Ordering System

ULO----- Unliquidated Obligation
UMD----- Unmatched Disbursements
USAF----- United Stated Air Force
USN----- United States Navy
WAWF ----- Wide Area Work Flow
WIPT ----- Working Integrated Process Team
WWW----- World Wide Web